

REMARKS

Claims 4-12 are pending in this application, with claims 4, 11 and 12 (amended herein) being independent.

Claims 11 and 12 have been rewritten in independent form and no longer depend from a rejected base claim, support for which can be found throughout the specification and the drawings.

Claim 4 has also been amended, support for which can be found throughout the specification and drawings, including Figure 3. Additionally, claims 4, 6-8, 11 and 12 have been amended based on the Examiner's kind suggestions during the personal interview as discussed below.

The specification has been amended by adding language that is supported in Figure 1 of the drawings, the same language of which has been added to claim 4, herein.

The drawings have been amended by replacing Figure 3 with a new Figure 3, designated as Replacement Sheet, which is clear.

Thus, by this Amendment, no new matter has been added and entry of these amendments is respectfully requested. Furthermore, Applicant respectfully submits that the amendment does not require further search and/or consideration by the Examiner and should therefore be entered.

Applicant thanks Examiner Lipitz and Primary Examiner Farah for the courtesy extended to the Applicant's representatives, Dinh Nguyen and Jared Barsky, during the personal interview conducted on Friday, November 20, 2009.

During the interview, Applicant's representatives explained the disclosure of the present application and discussed potential amendments and arguments relating to the Official Action of September 8, 2009 as discussed below in the Statement of Substance of Interview.

Statement of Substance of Interview

During the personal interview, Applicant's representatives explained the claimed invention and argued against the rejections in the Final Official Action. All claims were generally discussed, and in particular, independent Claim 4 and Claims 6-8 and 11-12.

First, Applicant's representatives pointed out that a translation was not provided for the Examiner's primary reference (i.e., WO 92/13597 issued to Przybilla) cited in the Official Action of September 8, 2009. Examiner Lipitz stated that he had not provided a translation to the Applicant because he could not find a translation, and that making a rejection without providing a copy of the reference made it an improper rejection. The Examiner agreed to attempt to procure a translation for the Applicant and the Applicant's representatives thank Examiner Lipitz for such arrangement.

The Examiner suggested that claim 8 should be written to indicate that the fan is ventilating the light source bulb, rather than stating merely, "the light source bulb is ventilated by a fan." The Examiner made this suggestion because the present claim language, for example, could indicate that any fan, including a fan separate from the apparatus, is being used to ventilate the light source bulb as the light source bulb was not positively claimed. As such, the current claim language, according to the Examiner, is unclear. In order to advance prosecution of this application, the proposed amendments to claim 8, above, indicate that the fan ventilates the light source bulb and the light source bulb is positively claimed.

Next, Examiner Lipitz agreed that amendments to claim 4 including the limitations of placing the bulb in the focal point of the mirror and leaving the path from the mirror to the bulb void of any other structures, would get around the Przybilla reference because Przybilla does not include those features. Additionally, the Examiner was concerned with claim language that is

considered a negative limitation. Again, in order to advance prosecution, rather than any agreement on Applicant's part that a negative limitation is not permissible, Applicant has rephrases the added limitation.

With regard to claims 6 and 7, Examiner Lipitz indicated that the specific elements that the computer controls should be listed for clarity, rather than stating that the computer controls, "the entire apparatus." Applicant's representatives agreed to add the specific elements to claims 6 and 7 to advance prosecution of the application, rather than any acquiescence that the claim is unclear.

Applicant's representatives have agreed to submit a replacement drawing for Figure 3, although Applicant's representatives asserted that a person having ordinary skill in the art would not need to read the diagram in detail to understand what it depicts and to understand the claimed invention.

Finally, the Examiner suggested that claims 11 and 12 should be amended to clarify the claimed invention. In order to advance prosecution, Applicant has amended these claims in the manner suggested by the Examiner.

Again, Applicant's representatives thank Examiner Lipitz and Primary Examiner Farah for their suggestions and time in support of expediting prosecution of this application.

OBJECTIONS TO THE DRAWINGS

The Examiner objected to the drawings by stating that Figure 3 is unclear and, "New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application..." To expedite prosecution of the instant application, Applicant has included a "Replacement Sheet" depicting the features of Figure 3 more clearly in compliance with the Examiner's request. However, Applicant believes that previously submitted Figure 3 is understandable and clear to a

person having ordinary skill in the art, even without the ability of such person to read the numbers and letters designated therein.

Additionally, the Examiner stated that the fan is not shown in the figures. Applicant directs the Examiner to Figure 1, item 5, which is described as a fan in the specification and further discussed below. Examiner Lipitz took note that this feature was disclosed and that such is not new matter at the personal interview on November 20, 2009.

As such, removal of this basis for objection is respectfully requested.

OBJECTIONS TO THE SPECIFICATION

Applicant thanks the Examiner for withdrawing the previous objection to the specification. However, the Examiner has objected to the amendment, which was filed on May 26, 2009, under 35 U.S.C. 132(a), as introducing new matter into the disclosure. Specifically, the Examiner referred to the amendment reciting the fan being located outside of the case as introducing “new matter into the disclosure.” Applicant respectfully directs the Examiner’s attention at least to Figure 1 of the drawings. Applicant asserts that the configuration of placing the fan outside of the case (1) and in front of the opening (a) is clearly depicted in Figure 1 of the instant application. Figure 1 clearly shows the case (1) as being separated from the fan (5) by the base plate (2). Furthermore, the case (1) is clearly located above both the base plate (2) and the fan (5). Because this configuration was clearly disclosed at least in the aforementioned Figure of the specification, the language of claim 8, “wherein the light source bulb is ventilated by a fan located outside of the case” is not new matter. In addition, on page 5 of the original specification, the language indicates, “a fan (5) will be set in front of a main orifice (a).

Thus, withdrawal of this basis for objection is respectfully requested.

OBJECTIONS TO THE CLAIMS

The Examiner objected to claim 12 on page 4 of the Official Action for being improperly dependent upon a canceled claim. The Examiner also objected to claims 11 and 12 as failing to further limit the subject matter of a previous claim. The Examiner, however, noted that the Applicant can “rewrite the claim(s) in independent form.”

Applicant has complied with this suggestion by the Examiner by rewriting claims 11 and 12 in independent format. Thus, claims 11 and 12 no longer depend from cancelled or rejected claims. In addition, the issue that they fail to further limit the subject matter (of canceled claim 1 as the subject matter of independent claim 4 is added to these dependent claims instead) is thereby rendered moot based on the added features by way of this Amendment.

As such, withdrawal of the above bases for objection is respectfully requested.

REJECTIONS OF THE CLAIMS UNDER 35 U.S.C. § 112

The Examiner rejected claim 12 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This basis for rejection should be rendered moot, based upon the amendments herein to claims 11 and 12, wherein Applicant has rewritten those claims in independent format to include all of the limitations of the independent claim 4. As such, all of the elements or modifications of elements are presently included in the respective claims.

Therefore, Applicant respectfully requests withdrawal of this basis for rejection.

REJECTION OF THE CLAIMS UNDER 35 U.S.C. § 102

The Examiner rejected claim 4 under 35 U.S.C. § 102(b) as being anticipated by Przybilla. Applicant respectfully traverses this rejection based on the amendments to the claims and the arguments below.

Regarding claim 4, the claims of the present application distinguish the invention over Przybilla in that in Przybilla, the bulb is positioned on one side of the mirror, and the ventilator (i.e., called a fan in the instant application) is positioned between the light source and the concave mirror. Przybilla discloses on page 3, at paragraph 5, that palettes (9) of the ventilator (10) are placed at a focal distance of the concave mirror (7) and not of the light source (6). This arrangement is both structural and functional in that it results in a dispersal of the reflected flux, which inhibits the rectilinear concentration and convergence flux from being formed in the direction of the exit (b) of the case (1). Second, Przbilla discloses the placement of two rotating cylinders in a rectilinear manner. Rotating cylinders are not required in the instant application.

In the instant application, claim 4 is structured so as to avoid including limitations tending to disrupt the convergence flux, as depicted in Figure 1. Such a structural arrangement of having a void area from the bulb to the mirror improves upon the convergence of the reflected flux over Przybilla. Przbilla, on the other hand, teaches away from forming a similar type of convergence flux in that it specifies that the light flux obtained therein is not a concentrated and rectilinear one, but rather it is one having three components with different propagation directions.

The following language has been added to claim 4 so as to articulate the aforementioned distinction: “wherein the light source bulb is mounted in a focus of the concave mirror so that the light flux is made up of rays reflected in a rectilinear manner by the concave mirror...” Also with regard to claim 4, Applicant has amended claim 4 to recite the limitation of, “wherein the space

from the light source bulb to the parabolic mirror is unobstructed with elements that inhibits the convergence flux.”

As these features are shown throughout the specification and drawings, including Figure 1, no new matter has been added by way of entry of this Amendment. Additionally, to make certain that such language has support in the description, paragraph 8 on page 5 of the specification has been amended to include the same. Finally, Applicant asserts that use of the word “unobstructed” is a positive limitation.

In addition, in the instant application, the fan (5) is placed in front of orifice (a) and outside of the case. The fan (5) serves only to reduce the temperature of the chamber generated by light source (4), being placed in front of opening (a) in the direction of the light source (4). As noted above, this fan is placed far enough from the bulb (4) and the mirror (6) so as to avoid interrupting the convergence flux. This is consistent with the above language that has been added to claim 4 and serves to distinguish claim 4 from the disclosure of Przybilla.

Another important novel aspect of the instant application, which supports the additional language added to claim 4, is that regarding the positioning of the light source directly in the path of the focal point of the parabolic mirror (6). Such placement prevents obstacles in the path of the light flux and causes the reflected light to travel uninhibited in a rectilinear manner, concentrating the photons and convergence towards the optical filter (11). As such, this aspect represents both a structural and functional advantage of claim 4 over Przybilla. The Applicant has added the following language to claim 4: “wherein the light source bulb is positioned directly in the path of the focal point of the parabolic mirror.”

Applicant also notes that the instant application differs from Przybilla in that the two reflective rotating cylinders, which are present in Przybilla, are not required in the instant

application. As such, the construction of the claimed invention being accomplished with less machinery than that required in Przybilla, renders the claims improperly rejected as anticipated by Przybilla.

For at least the reasons above, Applicant asserts that independent claim 4 is not anticipated by Przybilla because the claimed features are structurally and functionally distinguishable from Przybilla's device.

With regard to claim 10, the Examiner noted that Przybilla teaches that the optical filter permit the passage of a light containing a wavelength of 650 nm. However, Applicant wishes to point out to the Examiner that the wavelength recited in Przybilla is that of 650 mm not nm. As such, the light source of Przybilla has a frequency that is not in Applicant's claimed range, contrary to what was asserted on page 5 of the Official Action. Applicant brought this to the attention of the Examiner during the personal interview and the Examiner stated that this discrepancy was a mere typographical error in Przybilla. However, as the Office Action did not include an English translation, it is unclear how this was determined as typographical error in Przybilla.

Accordingly, Applicant respectfully requests withdrawal of this basis of rejection.

With regard to claims 11 and 12, Przybilla fails to mention anywhere that the device is capable of modulating the light flux to have a lower frequency. Claim 11, specifically requires and recites "the orifices of the rotating shutter disc to be variable, depending on the frequency of the light flux." Applicant asserts that the slit regulating device (9), as claimed in claim 11, as being placed in front of the rotating shutter disc (8) represents an additional novel aspect of the instant application. The slit regulating device (9) directs the light beam in "light pockets" succeeding with a frequency that is less than the frequency of the emitted photons and with a wavelength that is

greater than that of the photons emitted by the source. The amplitude of the modulation is distinct from Przybilla in that in Przybilla, the penetration is related only to the wavelength of the photons emitted by the light source, rather than the frequency of the emitted photons. Thus, the instant application includes an additional modulation of the original beam, both in frequency and amplitude. As such, another important structural distinction of the present invention is the assembly, comprising the rotating shutter disc (8) and the slit regulating device (9), wherein the shape and dimension of the slits may be adjusted. Moreover, it is possible to simultaneously regulate the speed of rotation of the shutter disk and slit adjusting device in relation to the frequency of the flux of photons.

Examiner Lipitz agreed during the personal interview that this aspect does differ from Przybilla, in that the frequency in Przybilla cannot be modulated. The limitation that the frequency is variable based on the rotating frequency of the shutter disc and by “varying the power of the incandescent bulb...” is disclosed on pages 10 and 11 of the original specification. Such feature is included in claims 11 and 12, as they were pointed out to the Examiner during the personal interview.

Specifically, the shutter disc of the instant application has an optimum dimension of 200 mm, against 150 mm of the Przybilla apparatus. The shutter disc has been structured so as to be proportional with the light flux intensity corresponding to the rotating frequency of the disk. This enables the modulation of light in the photon packets, both in frequency and amplitude. To accomplish this, the speed for the shutter disc must range from 1550-3000 turns/minute and the shutter disc dimension is proportional with the light flux intensity and must also correspond to the rotating frequency. In Przybilla, there is no frequency variation in any respect. Thus, this is another example of why the Examiner cannot properly conclude that the instant application is

anticipated by Przybilla. Claim 12 specifically recites, “wherein the slit regulating device is configured to modulate the light flux to have a lower frequency.” As such, the language, “wherein the form and dimension of the orifices of the rotating shutter disc is proportional to the light flux” has been added to claims 11 and 12.

Therefore, claims 11 and 12 of the instant application are not anticipated by the disclosure of Przybilla. Accordingly, Applicant respectfully requests withdrawal of this basis for rejection.

REJECTIONS OF THE CLAIMS UNDER 35 U.S.C. § 103

The Examiner rejected claims 5, 6, 7 and 8 under 35 U.S.C. § 103 as being unpatentable over Przybilla, in view of Anderson.

With regard to claim 8, the Examiner asserted that although Przybilla does not teach a fan located outside of the case, on page 6 of the Official Action, the Examiner interpreted “any element as being capable of being located outside of the case.” The Examiner, however, mentioned as the motivation for placing the fan outside of the case as being the need to have “access to the part of the case where the fan was housed.” Applicant respectfully notes that the motivation in the instant application was that of reducing the impact that the fan would have on light flux convergence consistent with a fan placed in closer proximity to the bulb and mirror. Applicant also notes that access to the fan could be established even if the fan was located within the case (1), merely by providing for such access through a compartment or other access path.

With regard to claims 5, 6 and 7, the Examiner explained that Przybilla does not teach that the light modulator flux is digital, however, Anderson does teach such, rendering this limitation obvious, under 35 U.S.C. § 103(a). Applicant asserts that claim 5 is patentably distinguishable from the applied prior art because it depends from patentably distinguishable claim

4, as discussed above.

In Anderson, the purpose of the digital modulator of the light flux differs from the instant application. Anderson defines the platform system as including an imaging system for rapid real-time detection of tissue characteristics... As such, it is clear that Anderson is meant to determine the characteristics of human tissues for the purpose of applying a laser treatment, and as a consequence, the light flux is not designed for the treatment of tissues. Specifically, Anderson is designed to "non-invasively identify and locate one or more subsurface targets based on predetermined conditions for selective laser treatment at a tissue surface area..." Such characteristics include a determination of shape, color, contrast, brightness, etc. Paragraph [0206] of the specification in Anderson does not enable how the modulation of light flux occurs. Rather it follows that the information required for determining the characteristics for which "the system" was created, are performed by a computer. Anderson fails to disclose that the functioning of the computer for coordination and control of the processes are performed from inside the apparatus.

Paragraph [0076] of Anderson merely mentions that the coordination is performed by a computer.

Claims 6 and 7 of the instant application specify that only the processes inside the apparatus are uniquely controlled and co-coordinated by a computer, the functioning of which is described and enabled in detail in the specification. The language of claims 6 and 7 requires a computer to control the apparatus's handling and coordination and are now amended to recite the specific elements that are controlled by the computer.

Therefore, Anderson does not cure the deficiencies of Przybilla. Thus, withdrawal of this rejection is respectfully requested.

With regard to claim 9, the Examiner rejected claim 9 under 35 U.S.C. 103(a) as being

unpatentable over Przybillla as applied to claim 4 above, and further in view of Fairbank, (U.S. Patent No. 2,504,312).

The entire structure disclosed in Fairbank is designed to correct the exposure to the light in the lens in front of which it is mounted. The mechanism is operated through a mechanical system, served by a counter-weight, the rotation of which depends upon the magnitude and characteristics of delivery of the force applied to lung (40) for initiating clockwise rotation. This differs from the claims of the instant application in that in Fairbank the rotation movement of the shutter is executed at each lens cycle and only in connection with this exposure, meaning that it closes the exposure orifices in the stationary position of the camera and opens them in order to vary the exposure time.

Conversely, the claimed apparatus of the instant application exposes the lens to natural light, such that the most accurate photographic image is obtained. As such, Fairbank does not cure the deficiencies of Przybillla.

Applicant respectfully requests withdrawal of this basis for rejection.

NO NEW ISSUES RAISED

The presently proposed amendments were made at the suggestion of the Examiners, or to further clarify previously recited limitations. Additionally, changes are being proposed simply to overcome a number of minor formal concerns expressed by the Examiners. Accordingly, no new issues are raised and entry of the present Amendment is urged.

CONCLUSION

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate. It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as the intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Should the Examiner have any questions or comments regarding this matter, the undersigned may be contacted at the below-listed telephone number.

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